

## TECHNICAL AND HISTORICAL EXAMINATION OF *VIRGIN SURROUNDED BY FLOWERS* PAINTING OF JAN VAN KESSELI

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### ABSTRACT

The Flemish still-life *Virgin Surrounded by Flowers* from Jan van Kessel I has been submitted to a conservation treatment and technical examination at Museu Nacional de Arte Antiga. The aim of the study was the knowledge of materials, artist's practice and collaboration of artists. Technical analysis illuminates the highlights that the artists follow the rules of St. Luke Guild concerning materials and collaboration of artists. Furthermore historical analyses highlight the purpose that this kind of paintings had a devotional function.

**Keywords:** Still- life, Jan van Kessel, conservation treatment, scientific analysis.

### INTRODUCTION

Jan van Kessel I (1626-1679) came from a very artistic family circle, the Brueghel family. His father Hieronymus van Kessel (c. 1578- 1635) married with Pachaise Brueghel. Van Kessel was the grandson, by maternal line, of Jan Brueghel "The Elder" (1568-1625), nephew of Jan Brueghel "The Younger" (1601-1678), and David Teniers "The Younger" (1610-1690) [1].

In 1644-45 Jan van Kessel became specialized on flower painting by the St. Luke Guild of Antwerp [2], and his painting reflects the influences of his family concerning the representation of flowers and van Kessel's affection for zoology and miniature painting [3].

*Virgin Surrounded by Flowers*, (Fig. 1), dated and signed, 1648, belonging to the Museu Nacional de Arte Antiga, Lisbon, follows the model from the earliest known garland painting with a religious theme performed by Jan Brueghel (1568-1625) in collaboration with Hendrick van Balen (1575?-1632). Federico Borromeo (1564-1631), Archbishop of Milan, commissioned the *Virgin and Child in a Garland of Flowers* (Fig. 2) to pay tribute to the paintings of the Virgin that had been destroyed during the furious outbreak of iconoclasm in Antwerp, and other cities in Low Countries during the end of 16<sup>th</sup> century [4].

### MATERIALS AND METHODS

Technical examination allied to the conservation treatment of *Virgin Surrounded by Flowers* provided a deep knowledge to the main questions posed by this painting: Which materials (pigments, fillers and mediums) are present at the *Virgin Surrounded by Flowers*? Did van Kessel followed the painting practice documented on 17<sup>th</sup> century treatises? Is this work a collaboration of artists regulated by the Antwerp Guild? If it is a collaboration of artists, which artists participated?

To answer these questions it was required several exams and analytical methods such as: ultraviolet (UV) and infrared (IR) photography, IR reflectography, radiography, optical microscopy (OM), staining tests, gas chromatography, scanning electron microscopy with energy dispersive x-ray spectrometry (SEM-EDX), Fourier transform infrared micro-spectroscopy ( $\mu$ -FTIR), to further supplement the technical evidence from the painting.

### RESULTS

Material analysis had highlighted the use of similar materials and techniques of painting practice documented on 17<sup>th</sup> century's treatises. *Virgin Surrounded by Flowers* linen canvas has been sized and Jan van Kessel preferred a double ground (Fig. 3). The first layer is whitish-beige, composed with chalk, lead white and carbon black pigments binded



with animal glue. The second layer, a grey priming is composed by calcium carbonate, lead white and carbon black pigments in linseed oil medium. The pigments are the common used in 17<sup>th</sup> century artist's pallet (lead tin yellow, vermilion, azurite, among others) [5]. The painting has been treated before, denoting a presence of a flour paste lining and chromatic retouching.

Combining the results from the optical microscopy (OM) and the observation during conservation treatment, it was found that *Virgin Surrounded by Flowers* was executed by the collaboration of two artists. The painting technique of the garland and Virgin were too different. Comparing Van Kessel technique to the representation of the Virgin, evidences showed that the garland painting technique was too detailed, the paint layers were thin, smooth and flatly applied, not denoting strong strokes and the rare *impasto* was well delimited. The Virgin painting technique denoted greater freedom and spontaneity in the dash. Texture was more diverse due vibrating and lively brushstrokes, where the use of *impasto* was frequent on the color layer, particularly on the Virgin's face. Furthermore, the cleaning treatment had showed different reactions between the chromatic layer of the garland and the Virgin, where the last one was more sensitive to solvents.

*Virgin Surrounded by Flowers* has a golden inscription underneath the Virgin chromatic layer (Fig. 4), which has been found during the conservation and restoration treatment. Observing the radiography, this inscription exposed a religious character, possibly a Marian invocation, however the Virgin radiopaque chromatic layers did not revealed the full text. The inclusion of the inscription may have been intentional as a way to emphasize the figure of the Virgin, but at certain date, by unknown reasons was covered by the representation of the Virgin. The inscription was probably made after the Van Kessel garland, and seems to have been adapted in order not to overlap the painter chromatic layer.

It is probable that Jan van Kessel performed the garland of flowers, as it was his specialty, and that the representation of the virgin was done by another painter, perhaps someone from the van Balen family, possibly Jan van Balen (1611-1654) or Gonzales Coques (1614 or 1618- 1684). Although, further comparative studies of the above painters would help to clarify such assumptions.

## CONCLUSIONS

Technical and historical examination of *Virgin Surrounded by Flowers* has highlighted the still-life in a garland with a religious motif as gender that emerged itself in a controversial era. The main purpose of this sort of paintings had a devotional function. The main characteristics of the 17<sup>th</sup> century Antwerp painting technique regulated from St. Luke Guild are clearly present in the *Virgin Surrounded by Flowers*, regarding the collaboration of artists, painting materials and techniques. Furthermore the golden inscription underneath the Virgin chromatic layer still poses questions about its meaning, function and the later covering action.

## ACKNOWLEDGEMENTS

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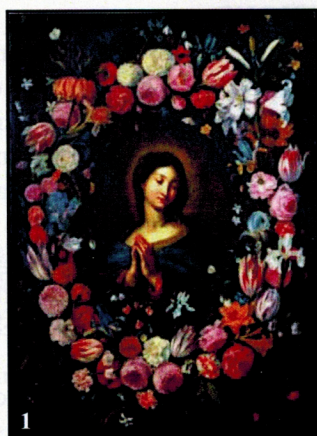


Fig. 1 – Jan van Kessel I, *Virgin Surrounded by Flowers*.  
Oil on canvas, Dimensions:  
124 x 90 cm. Museu Nacional  
de Arte Antiga, Lisbon.  
Credits: Carlota Barbosa

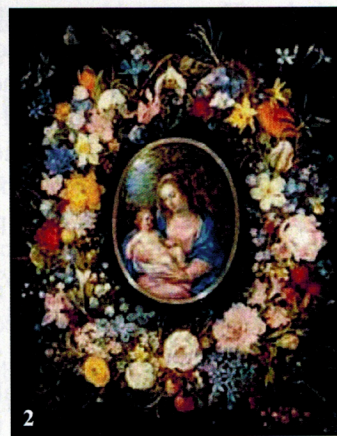


Fig. 2 – Jan Brueghel and  
Hendrick van Balen, *Virgin and  
Child in a Garland of Flowers*.  
Oil over panel and silver.  
Dimensions: 27 X 22 cm.  
Pinacoteca Ambrosiana, Milan.  
March, 2014.  
[Online]: WWW:<URL:  
[http://www.pinterest.com/  
pin/478155685408861651](http://www.pinterest.com/pin/478155685408861651)

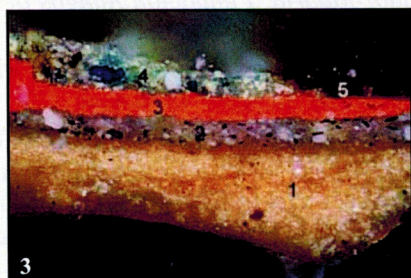


Fig. 3 – Cross section from a sample  
taken from *Virgin Surrounded by  
Flower*. Green leaf over a red flower  
petal, showing the use of double  
ground.  
Credits: Enrique Parra, Larco química  
laboratory.

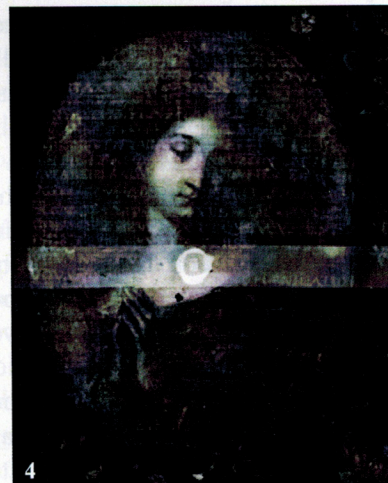


Fig. 4 – Detail of the radiography  
where it is possible to observe the  
golden inscription underneath the  
Virgin chromatic layer.  
Radiography performed by José  
Figueiredo laboratory.